

THE UNIVERSITY OF KANSAS
Institute for Public Policy and Business Research
School of Business
Department of Economics
RESEARCH PAPERS

**The Effective Labor Force
in the Montgomery County Labor Market**

**prepared for
Montgomery County Action Council**

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EXECUTIVE SUMMARY

The Montgomery County Labor Market contains a sizable pool of available labor, much of it educated and trained. Survey results indicated that in September 1997, about 2,000 persons were unemployed and 4,300 more were underemployed, creating a labor pool of about 6,300 persons either seeking employment or seeking improved employment. The underemployed workers are educated and skilled and want full-time, permanent jobs that require the skills they have developed through education, formal training, and on-the-job training.

This report is based on a survey of the Montgomery County Labor Market conducted in September 1997 by the Institute for Public Policy and Economic Research located at the University of Kansas. The 400 responses, from a region containing all or parts of ten counties in both Kansas and Oklahoma, found an unemployment rate of 4.0% and an underemployment rate of 9.1%. Analysis suggests that the estimated unemployment rate is probably biased downward, and that the "true" unemployment rate is probably somewhere between 4.1% and 4.5%.

In addition, a higher percentage of the employed workers in this labor market are currently in school or receiving additional special training (11.8%) than was found in the state of Kansas two years ago. Members of the labor force want and continue to improve its skills, primarily for the purpose of either finding a better job or getting a promotion at their current place of work. These are the primary results of the Montgomery County Labor Market survey.

Conclusions and Policy Implications

1. The large number of underemployed persons in the Montgomery Area provides a special opportunity for firms seeking educated and skilled labor.

- Economic development efforts should be targeted toward firms that need an educated and skilled labor force.
- The quality and availability of labor market information should help firms and employees match skills and jobs better.

2. The desire for further education and training on the part of the labor force represents an opportunity for businesses and educational institutions in the area.

- Enhancing programs that provide help to persons seeking the additional education and training should prove productive for workers, firms and the local economy.
- The desire for training by the labor force should encourage more cooperation between businesses and the educational institutions and make that cooperation more effective.

INTRODUCTION

The Montgomery County Labor Market¹ contains a sizable pool of available labor, much of it educated and trained. Survey results indicated that in September 1997, about 2,000 persons were unemployed and 4,300 more were underemployed, creating a labor pool of about 6,300 persons either seeking employment or seeking improved employment for which they are qualified. The 4,300 underemployed are educated and skilled workers who want full-time, permanent jobs that require the skills they have developed through education, formal training, and on-the-job training.

This report is based on a survey of the Montgomery County Labor Market conducted by the Institute for Public Policy and Economic Research located at the University of Kansas. The 400 responses from a region containing all or parts of ten counties in both Kansas and Oklahoma, found an unemployment rate of 4.0% and an underemployment rate of 9.1%. Analysis suggests that the estimated unemployment rate is probably biased downward, and that the “true” unemployment rate is probably somewhere between 4.1% and 4.5%.

In addition, a higher percentage of the employed workers in this labor market are currently in school or receiving additional special training (11.8%) than was found in the state of Kansas two years ago. Members of the labor force want and continue to improve its skills, primarily for the purpose of either finding a better job or getting a promotion at their current place of work. These are the primary results of the Montgomery County Labor Market survey.

Background

Significant structural changes in the use of employees by firms became apparent during and after the last recession. In order to keep short-run labor costs down, firms have downsized, restructured, reengineered, emphasized improvements in the quality of a workers’ output, asked workers to behave as entrepreneurs, asked workers to behave as if they were self-employed, encouraged workers to “not work harder, work smarter”, etc. Naturally these changes have effected the labor market. Many people who were trained for relatively high paying, skilled jobs have seen their occupation shrink; such as legal secretaries and accountants. At the same time firms have used out-sourcing and temporary employees to fill in the gaps left by employing fewer people.

These changes and other changes along with the general complexity of the labor market suggest that using the standard categories of the civilian labor force may not adequately describe the labor market. In particular, the unemployment rate usually underestimates the available labor supply in

¹The geographical area that encompasses the Montgomery County Labor Market is defined later in the text and page 5 has a map of the area. This geographical area will be referred to as the Montgomery Area.

almost any labor market. In 1995 the Institute for Public Policy and Business Research conducted a detailed survey of the Kansas labor market and estimated not just the employed and the unemployed, but also estimated the underemployed. As the title of that report implied — *The Effective Labor Force in Kansas: Employment, Unemployment, and Underemployment* — our survey led to a more comprehensive description of the labor force than the standard categories of employed and unemployed.²

The Survey

The basis of this report is a survey of the Montgomery County Labor Market. This survey used a survey instrument nearly identical to survey instrument used in the statewide survey. Although two years elapsed between the two surveys, because identical questions were asked in nearly the same order, the results of these two surveys provide a basis for comparing the Montgomery County Labor Market to the Kansas Labor Market. That comparison is central to this report.

Outline of the Report

This report is separated into four basic sections. The first part will analyze the survey respondents and compare these respondents to the 1995 statewide study to establish the merits and reliability of the Montgomery Area survey. The second part will provide our estimates of the Effective Labor Force for the Montgomery Area. In addition, we will compare the estimates these estimates with the earlier statewide study. The third part of the report will make some demographic comparisons between the effective labor forces statewide and in the Montgomery Area. The final part of the report will present conclusions and policy suggestions. The fourteen tables discussed in the report are all contained in Appendix A at the end of the report. In addition, we have included appendices to provide further detailed description of how the survey instrument was constructed, a copy of the survey instrument, and more detail on how the survey was administered.

²For a more complete discussion of the motivation and purpose for investigating other approaches to studying the labor market see the research report *The Effective Labor Force in Kansas: Employment, Unemployment, and Underemployment* by Robert H. Glass, Charles E. Krider, and Kevin Nelson prepared for Kansas, Inc. January 1996., pp. 1-6. We will refer to this report as either *The Effective Labor Force in Kansas* or as the 1995 study since the survey was done in May 1995.

THE SURVEY: DESIGN, ADMINISTRATION AND RELIABILITY

The Design of the Survey Instrument

The survey instrument used for the Montgomery Area survey is nearly the survey instrument used in *The Effective Labor Force* which was based on the instrument used for the Current Population Survey — the survey that provides the data for the Bureau of Labor Statistics civilian labor force estimates. The major difference between the survey instrument developed for the 1995 study and the survey instrument used for the Current Population Survey is the increased emphasis on underemployment in the 1995 survey instrument. We established four categories of underemployed: discouraged workers, part-time workers who want full-time jobs, temporary workers who want permanent jobs, and workers whose skills are mismatched with their current job.³

The most troubling group to estimate is the mismatched workers. This group is best explained through examples such as a plumber taking tickets at a movie theater or a college graduate flipping hamburgers for a living. From these examples one can see potential pitfalls in identifying this category of worker. Suppose that the plumber is only plumber in his own mind — he has no legitimate training for the job; or suppose the college graduate does not want to have a “better” job because she wants to be an actor. Thus, we included additional questions that aim to have the person verify themselves as a mismatched worker. Our basic criteria was that the person had to convince us they were a mismatched worker.⁴

The differences between the survey instrument for this survey and the survey instrument for *The Effective Labor Force* involve the dropping of a few questions and the addition of some questions on commuting to work and retail shopping. Retail shopping will not be discussed in this report. The full survey instrument is provided in Appendix C.

The Administration of the Survey

The survey is designed to identify the effective labor force for the Montgomery County Labor Market. Montgomery County has two medium sized cities: Independence and Coffeyville. Independence has the new aircraft production plant and Coffeyville sits near the Oklahoma border. Both of these facts suggest that the boundaries for the labor market in Montgomery County exceed

³Discouraged workers and part-time workers who want full-time jobs are groups that the Bureau of Labor Statistics estimates. Temporary workers who want full-time jobs is not a category that they estimate. Developing questions to identify this group and estimating their number is rather straight forward.

⁴Appendix B has a detailed description, taken from the 1995 study, of how these sections of the survey instrument were developed.

the county borders. As a result, the Montgomery County Labor Market was defined geographically as the area within about a 40 mile radius of either Independence or Coffeyville — this area includes all or parts of 11 counties, 7 counties in Kansas and 4 counties in Oklahoma. (See the map on the following page for a delineation of the area.) For surveying purposes, 35 phone exchanges were identified as the area to be surveyed.⁵ Phone number were randomly generated for these phone exchanges to generate the survey sample. The survey was conducted from September 8 till September 26 with a total of 400 complete responses collected.

The Reliability of the Survey

Although 400 completed responses were obtained, because of the over representation of women in the survey sample, any respondent who refused to provide their gender was dropped from the survey sample leaving 394 respondents — 259 women (65.7%) and 135 men (34.3%). Although this initially seemed like a curious over-sampling of women, a comparison to 1995 study indicated it was not unusual for this area of Kansas. Table 1 illustrates this point by showing the breakdown by gender, both statewide and for the six Kansas counties in the 1995 study sample, and the breakdown by gender for the Kansas portion of the 1997 Montgomery Area survey sample. Although statewide the 1995 survey sample was 61.3% women, the portion of the survey sample from the six Kansas counties was 73.0% women. The dramatic over-sampling of women seems to be a problem endemic to this part of Kansas.

Our response to the over-sampling of women was to weight the survey sample.⁶ We partitioned the survey sample in four ways: Kansas men and women and Oklahoma men and women, for the purpose of weighting the survey sample. Table 2 shows the results of the weighting process. To facilitate a recognition of the use of these weights, whenever weighted survey data is used, either in the text or in the tables, the numbers will be rounded to one tenth of a person.

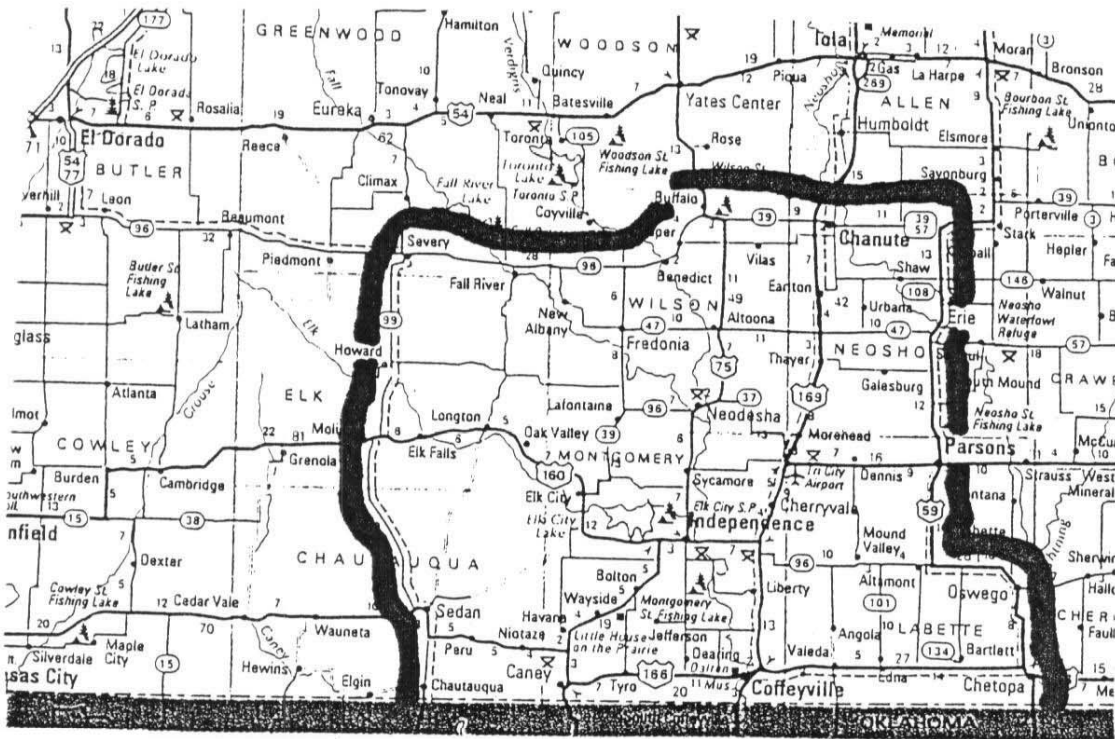
⁵The counties which were identified as part of the Montgomery County Labor Market are listed, along with the phone exchanges used in the random selection of phone numbers, in Appendix D. Part of Labette County was identified belonging to the Montgomery County Labor Market and ten cities were targeted for the survey. Unfortunately no usable responses were obtained from Labette County. Thus, Labette County is absent from Tables 1 and 2.

⁶Initially we partitioned the survey sample in four ways: Kansas men and women and Oklahoma men and women. Then population figures for men and women from the 1990 United States Census for each of the counties were aggregated into the same four groups as the survey sample. Finally, weights were calculated for each of the four sub-samples with two constraints: the number of survey responses for each state and the weighted number of survey responses for each state were equal. The weights are: Kansas male - 1.370209; Kansas female - 0.809959; Oklahoma male - 1.371752; and Oklahoma female - 0.802187.

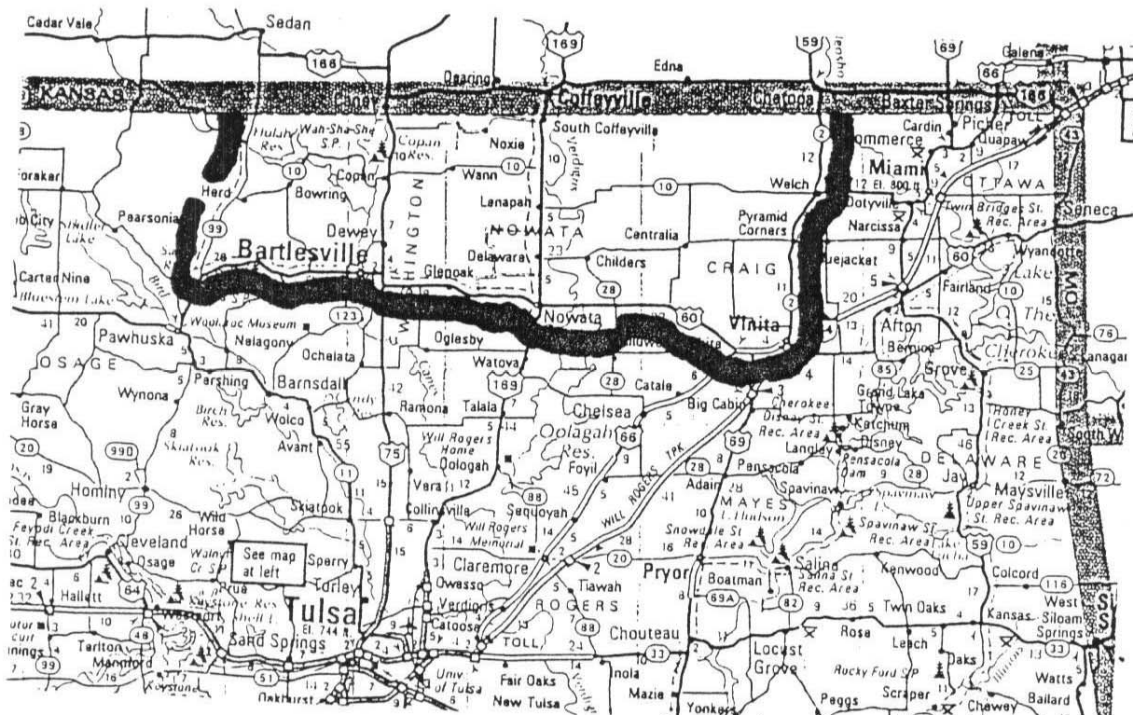
Region Surveyed

(The area along and within the bounded region is the designated geographic region from which the sample population was selected.)

Kansas



Oklahoma



THE EFFECTIVE LABOR FORCE

Labor Market Participation

The labor force participation rate from the Montgomery Area survey was 58.2%.⁷ This is relatively low compared to the Kansas labor force participation rate of 64.1% from our 1995 study. The relatively large number of residents in the Montgomery Area over 65 years old probably accounts for the low labor force participation rate. Table 3 has the data for all the major effective labor force categories, including labor force participation rate, for the Montgomery Area and for Kansas from the 1995 study.

Table 4 has the breakdown of the Montgomery Area Effective Labor Force by state and by gender. The Kansas portion of the area has a slightly higher labor force participation rate (58.6%) than the Oklahoma portion (57.6%). For cultural reasons, women have historically had a lower labor force participation rate than men, although the gap has closed significantly in the past 30 years.

Civilian Labor Force

The number of employed persons in the Montgomery Area is 229.2 and the number of unemployed persons is 9.2 giving an unemployment rate for the area of 4.0%. Table 3 shows that the state of Kansas had the same unemployment rate in our 1995 survey. Because the Montgomery County Labor Market does not follow county lines, the labor force estimates developed from our survey cannot be precisely compared to the county labor force estimates developed by the Kansas Department of Human Resources and the Oklahoma Employment Security Commission.⁸ However, in 1995 we were able to compare our labor force estimates with the Department of Human Resource estimates for the state of Kansas. Table 5 has this comparison.

⁷The Civilian Labor Force is defined by the Bureau of Labor Statistics as the number of employed and unemployed persons. Only participants in the labor market are part of the Civilian Labor Force. The labor force participation rate is defined by the Bureau of Labor Statistics as the number of persons over the age of 16 in the Civilian Labor Force divided by the total number of persons over the age of 16. Although the data is not exactly comparable, for the past year the labor force participation rate for the United States has been about 67%.

⁸The September 1997 preliminary unemployment estimates for the six Kansas counties are: Chautauqua — 6.1%, Elk — 3.5%, Greenwood — 3.8%, Montgomery — 5.0%, Neosho — 3.8%, and Wilson — 3.4%. The September 1997 preliminary unemployment estimates for the four Oklahoma counties are: Craig — 2.3%, Nowata — 4.5%, Osage — 3.6%, and Washington — 3.3%. To add some perspective to these numbers, Montgomery County provided 36.5% of the survey responses and Washington County provided 33.2% of the survey responses. Combined they account for almost 70% of the survey responses (69.7%). If one averages 5.0% and 3.3% the result is a little more than 4%. These September unemployment estimates suggest that our unemployment estimate is slightly low, but certainly not out of the ballpark.

Our estimate of the Kansas unemployment rate was 0.4% lower than the Department of Human Resources estimate which suggests a slight downward bias in our estimate of the unemployment rate. This downward bias is probably because we used a telephone survey. At any time, about 2% of the Kansas population does not have a working phone number, and the unemployment rate among this 2% is higher than the rest of the population. Thus, our estimate of a 4.0% unemployment rate for the Montgomery County Labor Market is probably low. We suspect that the unemployment rate is somewhere between 4.1% and 4.5%.

Table 5 also has estimates of the actual size of the Civilian Labor Force (47,500), the number of employed (45,600), and the number of unemployed (1,900) in the Montgomery Area.⁹ Because of the expected bias in our estimation of the unemployment rate, we think that 2,000 is a good estimate of the number of unemployed in the Montgomery County Labor Market.

Underemployment

Table 3 contains the estimates of underemployment in the Montgomery County Labor Market and in the Kansas Labor Market. The underemployment rate in the Montgomery Area is 9.1% compared to 6.3% statewide in 1995. Since the unemployment rates are the same for both labor markets, the combined unemployment and underemployment rates are 13.1% for the Montgomery Area and 10.3% statewide.¹⁰ Table 5 has an estimate of the number of underemployed for the Montgomery County Labor Market — 4,300. Combining the underemployed with the estimated number of unemployed gives an available labor pool of about 6,300.

A more detailed investigation of underemployment indicates that a greater percentage of the people in the Montgomery Area who could be underemployed are in fact underemployed than in the Kansas Labor Market. In percentage terms, 16.7% of statewide part-time workers want to be full-time while in the Montgomery County Labor Market 20.7% of part-time workers want to be full-time. Statewide, 60% of temporary workers want to be permanent while 80% in the Montgomery Area want to be permanent. Statewide, 9.5% of the workers who claimed to be mismatched were definitely mismatched while in the Montgomery Area the percentage was about 13.1% (See Table 6 for this data.).

⁹These estimates of the number of employed and unemployed persons in the Montgomery County Labor Market were derived by using estimates of male and female population by age group provided to the Montgomery County Action Council by National Decision Systems. The population of men and women over 17 was used as a basis to blow up the weighted survey estimates of the number of employed and unemployed person. The figures were rounded to the nearest hundred.

¹⁰Table 4 has the breakdown of underemployment by state and by gender. The number of responses is so small that these results can only be thought of as suggestive rather than statistically significant.

DEMOGRAPHIC ANALYSIS OF THE EFFECTIVE LABOR FORCE

Location and Gender

Table 7 shows county breakdowns for the number of persons in the survey, the number in the labor force, the number employed, the number unemployed, and the number underemployed. Because these numbers are small, the results are only suggestive, not statistically notable. Also the numbers in Table 7 are raw, unweighted data. Still it is interesting that Montgomery County has slightly more than a third of the people in the labor force, but has half the unemployed and almost half the underemployed for the whole Montgomery Area.

Age Structure

Table 8 has the age structure of the survey respondents separated into the same effective labor categories that were used for the location and gender table. Of the 394 responses, 100 were from people 65 or older and 47 of these 100 were Kansas women, further evidence of the older population in the area. The underemployed tend to be younger than the rest of the survey sample.

Educational Attainment

Tables 9 and 10 have the educational attainment of the respondents by the categories of the effective labor force for both Kansas and the Montgomery Area. These tables show that the unemployed and underemployed in the Montgomery Area follow the trend for the state. The underemployed are generally better educated than the rest of the labor force while the unemployed are generally less well educated than the rest of the labor force. Table 11 illustrates this finding in a different way. As the level of education increases, the unemployment rate drops and for the first several categories of education, the underemployment rate increases.

Special Training

Formal education in schools is certainly not the only way that workers can build their human capital. Table 12 compares special formal education (for example vocational schools) among the effective labor force in Kansas and the Montgomery Area. Almost 55% of the employed persons in the Montgomery Area have some formal special training while statewide the figure is slightly less than 51%. Table 13 makes the same type of comparison for special on-the-job training. In this case,

the employed persons in the Montgomery Area lag significantly behind the employed persons statewide.

Currently Enrolled in School or a Special Training Program

One of the surprises in the 1995 study was the large number of employed persons who were currently enrolled in some type of schooling or training program. Statewide, 11.4% of the employed persons were enrolled in either formal schooling (9.7%) or special training (1.7%). In the Montgomery Area, the figures are 11.0% enrolled in formal schooling and 0.7% enrolled in special training (see Table 14 for more details). The 11.0% enrolled in formal schooling reflects the role of the several community colleges in the area. What is important is that a sizable portion of the employed workers is increasing their human capital at the same time as they are working. In this situation, helping these people help to achieve their goals will not reduce their incentives to achieve.¹¹

¹¹Often forgotten because of the long list of government programs that have failed, is the incredible success of the G.I. Bill after World War II. The provision of supplements to help pay for schools and training, along with the dramatic expansion of “night schools” after war, paved the way for an enormous increase in human capital. This is another example of where helping people is compatible with their incentives to succeed.

CONCLUSIONS AND POLICY IMPLICATIONS

Conclusion: The pool of available labor for new or expanding firms in the Montgomery County Labor Market, about 6,300, is notably greater than the unemployment rate indicates for two reasons:

1. The low labor force participation rate in the Montgomery Area.
2. The high rate of underemployment in the Montgomery Area.

Enticing large numbers of people into the labor force may prove difficult. On the other hand, hiring underemployed workers has several advantages: they are currently demonstrating an ability to work within the discipline of the labor market, and, in general, they are better trained and educated than unemployed workers.

Policy Implications: The large number of underemployed persons in the Montgomery Area provides a special opportunity for firms seeking educated and skilled labor.

1. This suggests that economic development initiatives in the Montgomery Area should target firms that require trained and educated labor.
2. Improved availability of labor market information could entice additional persons into the labor force and help underemployed persons find jobs more in line with their education, skills, and aspirations..

Conclusion: Large numbers of employed persons are improving their training and skills through education. At the time of our survey, 11.7% of the employed persons were enrolled in either school (11.0%) or a special training course (0.7%). A large segment of the labor force is not content to only increase their skills with on-the-job experience, rather they are willing to invest their time and effort to improve their human capital.

Policy Implications: A work force that has large numbers of persons seeking additional training away from the workplace is a trainable work force. This is the type of labor force that should be attractive to firms that need motivated skilled and educated workers.

1. Further evidence that the Montgomery Area should target firms that provide good quality jobs.
2. The desire for further education and training on the part of the labor force represents an opportunity for businesses and educational institutions in the area.

- a. Enhancing programs that provide help to persons seeking the additional education and training should prove productive.
- b. The desire for training by the labor force should make cooperation between businesses and the educational institutions more effective.

Summary of Policy Suggestions

- 1. Target economic development efforts toward firms that want educated and skilled labor.
- 2. Improve the quality and availability of labor market information.
- 3. Enhance programs that help persons desiring additional education and training.
- 4. Encourage increased cooperation between businesses and local educational institutions.

APPENDIX A

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Table 3: Effective Labor Force: Kansas and Montgomery County Area

Table 4: Effective Labor Force by State and Gender for the Montgomery County Area

Table 5: Comparison of Labor Force Statistics

Table 6: Underemployment

Table 7: Survey Responses by County

Table 8: Age Structure by State and Gender

Table 9: Educational Attainment for the Effective Labor Force: State of Kansas (1995 Study)

Table 10: Educational Attainment for the Effective Labor Force: Montgomery County Area

Table 11: Unemployment and Underemployment by Educational Attainment Kansas and the Montgomery County Area

Table 12: Special Formal Training by Effective Labor Force Category

Table 13: Special On-the-job Training: by Effective Labor Force Category

Table 14: Currently Enrolled in Either School or Special Training

TABLE 1
COMPARISON OF THE CURRENT STUDY WITH
THE 1995 EFFECTIVE LABOR FORCE STUDY

Areas of Consideration	Total Responses			Civilian Labor Force		
	Total	Male	Female	Total	Male	Female
Results from the 1995 Study						
Kansas (1995)	2517	973	1544	1614	724	890
Chautauqua	3	3	0	1	1	0
Elk	4	1	3	2	1	1
Greenwood	12	5	7	4	1	3
Montgomery	37	10	27	20	6	14
Neosho	19	5	14	12	5	7
Wilson	25	3	22	14	2	12
Total for 6 Counties	100	27	73	53	16	37
Results from Current Study						
Chautauqua	5	1	4	1	1	0
Elk	5	3	2	5	3	2
Greenwood	1	0	1	0	0	0
Montgomery	144	49	95	80	36	44
Neosho	42	12	30	26	7	19
Wilson	30	12	18	15	7	8
Kansas Portion (1997)	227	77	150	127	54	73

TABLE 2
WEIGHTING OF SURVEY RESPONSES BY GENDER AND STATE

County	Males over 16	Number in Survey	Weighted Responses	Females over 16	Number in Survey	Weighted Responses
Kansas	29,419	77	105.5	33,877	150	121.5
Greenwood	2,960	0	0.0	3,273	1	0.8
Wilson	3,719	12	16.4	4,256	18	14.6
Neosho	6,210	12	16.4	6,848	30	24.3
Montgomery	13,628	49	67.1	16,239	95	76.9
Elk	1,253	3	4.1	1,425	2	1.6
Chautauqua	1,649	1	1.4	1,836	4	3.2
Oklahoma	41,575	58	79.6	45,691	109	87.4
Washington	17,142	45	61.7	19,676	86	69.0
Nowata	3,704	5	6.9	4,106	8	6.4
Craig	5,444	4	5.5	5,888	11	8.8
Osage	15,285	4	5.5	16,021	4	3.2
NOTE: The derivation of the weights used is explained in footnote number five in the text. The weights used are: Kansas male - 1.370209; Kansas female - 0.809959; Oklahoma male - 1.371752; and Oklahoma female - 0.802187.						
SOURCE: This information is from the 1990 Census						

TABLE 3
EFFECTIVE LABOR FORCE: KANSAS AND MONTGOMERY AREA
(ALL DATA WEIGHTED)

EFFECTIVE LABOR FORCE CATEGORIES	Kansas (1995)	Montgomery County Area
All Survey Participants	2517.0	394.0
Civilian Labor Force	1614.0	229.3
<i>Labor Force Participation Rate</i>	64.1%	58.2%
Employed	1488.9	220.1
Unemployed	65.1	9.2
<i>Unemployment Rate</i>	4.0%	4.0%
Underemployed		
Discouraged Workers	5.1	0.8
Part-time Want Full-time	34.2	6.0
Temporary want Permanent	33.8	8.1
Mismatch of Skills and Job	37.4	7.6
Total Underemployed	101.6*	20.9**
Unemployed & Underemployed	166.8	30.1
<i>Unemployed & Underemployed as a Percent of the Effective Labor Force</i>	10.3%	13.1%
<p>*Nine of the part-time who want to be full-time are also temporary who want to be permanent, and 3 of the mismatched are also temporary who want to be permanent).</p> <p>**One person was both a temporary employee who wanted permanent employment and a person with a mismatch between skills and job. Another person was both a temporary employee who wanted a permanent job and a part-time worker who wanted a full-time job.</p>		

$$\text{Labor Force Participation Rate} = \frac{\text{Civilian Labor Force}}{\text{All Survey Participants}}$$

$$\text{Unemployment Rate} = \frac{\text{Unemployed}}{\text{Civilian Labor Force}}$$

$$\text{Underemployment Rate} = \frac{\text{Underemployed}}{\text{Civilian Labor Force} + \text{Discouraged Workers}}$$

TABLE 4
THE EFFECTIVE LABOR FORCE
IN THE MONTGOMERY AREA BY STATE AND GENDER
(ALL DATA WEIGHTED)

EFFECTIVE LABOR FORCE CATEGORIES	Kansas Portion		Oklahoma Portion	
	Male	Female	Male	Female
All Survey Respondents	105.5	121.5	79.6	87.4
Civilian Labor Force	74.0	59.1	48.0	48.1
<i>Labor Force Participation Rate</i>	70.1%	48.6%	60.3%	55.0%
Employed	71.3	55.9	48.0	44.9
Unemployed	2.7	3.2	0.0	3.3
<i>Unemployment Rate</i>	3.6%	5.4%	0.0%	6.9%
Underemployed				
Discouraged Workers	0.0	0.8	0.0	0.0
Part-time Want Full-time	1.4	2.4	1.4	0.8
Temporary want Permanent	4.1	2.4	0.0	1.6
Mismatch of Skills and Job	1.4	3.2	1.4	1.6
Total Underemployed	6.9	8.1*	2.8	3.2**
Unemployed & Underemployed	9.6	11.3	2.8	6.5
<i>Unemployed & Underemployed as a Percent of the Effective Labor Force</i>	13.0%	18.9%	5.8%	13.5%

*One Kansas woman was both a temporary employee who wanted permanent employment and a person with a mismatch between her skills and her job.

**One Oklahoma woman was both a temporary employee who wanted a permanent job and a part-time worker who wanted a full-time job.

TABLE 5
COMPARISON OF LABOR FORCE STATISTICS

Kansas Labor Force

(from the Kansas Department of Human Resources)
April and May of 1995 averaged

Civilian Labor Force	1,351,299
Employed	1,291,304
Unemployed	59,995
Unemployment Rate	4.4%

Kansas Labor Force

(from *The Effective Labor Force in Kansas* Survey)
(April 13 to May 25, 1995)

Civilian Labor Force	1,351,299
Employed	1,296,794
Unemployed	54,504
Unemployment Rate	4.0%
Underemployed	85,063
Underemployment Rate	6.3%

Montgomery County Area Labor Force*

(September 8 to September 26, 1997)

Civilian Labor Force	47,500
Employed	45,600
Unemployed	1,900
Unemployment Rate	4.0%
Underemployed	4,300
Underemployment Rate	9.1%

*The estimates of the number of employed and unemployed persons in the Montgomery County Labor Market were derived by using estimates of male and female population by age group provided to the Montgomery County Action Council by National Decision Systems. The population of men and women over 17 was used as a basis to blow up the weighted survey estimates of the number of employed and unemployed person. The figures were rounded to the nearest hundred.

**TABLE 6
UNDEREMPLOYMENT**

	Kansas	Montgomery Area
PART-TIME WORKERS		
Total Part-Time Workers	228	29
Part-Time want Full-Time	38	6
Percentage of Total	16.7%	20.7%
TEMPORARY WORKERS		
Total Temporary Workers	55	10
Temporary want Permanent	33	8
Percentage of Total	60.0%	80.0%
MISMATCHED WORKERS		
Claimed to be Mismatched	391	61
Definitely Mismatched	37	8
Percentage of Total	9.5%	13.1%

NOTE: All data in this table is unweighted.

TABLE 7
SURVEY RESPONSES BY COUNTY
 (DATA IS UNWEIGHTED)

	Number in Survey		Civilian Labor Force		Employed		Unemployed		Underemployed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Kansas	77	150	54	73	52	69	2	4	5	10
Greenwood	0	1	0	0	0	0	0	0	0	0
Wilson	12	18	7	8	7	8	0	0	0	2
Neosho	12	30	7	19	7	17	0	2	0	3
Montgomery	49	95	36	44	34	42	2	2	5	5
Elk	3	2	3	2	3	2	0	0	0	0
Chautauqua	1	4	1	0	1	0	0	0	0	0
Oklahoma	58	109	35	60	35	56	0	4	4	7
Washington	45	86	25	45	25	44	0	1	2	3
Nowata	5	8	4	5	4	4	0	1	2	3
Craig	4	11	3	6	3	4	0	2	0	1
Osage	4	4	3	4	3	4	0	0	0	0

TABLE 8
AGE STRUCTURE BY STATE AND GENDER
(DATA IS UNWEIGHTED)

Age Categories	Kansas		Oklahoma		Total
	Male	Female	Male	Female	
<i>All Survey Respondents</i>					
Before 1932	12	47	14	27	100
1932-1942	13	23	8	16	60
1943-1952	15	30	11	15	71
1953-1962	21	20	9	24	74
1963-1972	10	15	7	17	49
After 1972	5	11	8	8	32
Refused	1	4	1	2	8
<i>Civilian Labor Force</i>					
Before 1932	1	2	1	2	6
1932-1942	6	9	6	5	26
1943-1952	14	24	7	13	58
1953-1962	20	15	7	21	63
1963-1972	8	12	7	14	41
After 1972	4	9	6	5	24
Refused	1	2	1	0	4
<i>Employed</i>					
Before 1932	1	2	1	2	6
1932-1942	5	9	6	5	25
1943-1952	14	23	7	13	57
1953-1962	20	15	7	20	62
1963-1972	8	12	7	12	39
After 1972	4	7	6	4	21
Refused	0	1	1	0	2
<i>Unemployed</i>					
Before 1932	0	0	0	0	0
1932-1942	1	0	0	0	1
1943-1952	0	1	0	0	1
1953-1962	0	0	0	1	1
1963-1972	0	0	0	2	2
After 1972	0	2	0	1	3
Refused	1	1	0	0	2
<i>Underemployed</i>					
Before 1932	0	0	0	0	0
1932-1942	0	0	0	0	0
1943-1952	1	2	0	1	4
1953-1962	2	3	1	2	8
1963-1972	0	2	1	1	4
After 1972	1	3	0	0	4
Refused	1	0	0	0	1

TABLE 9

EDUCATIONAL ATTAINMENT FOR THE EFFECTIVE LABOR FORCE:
STATE OF KANSAS (1995 STUDY)
(DATA IS WEIGHTED)

EFFECTIVE LABOR FORCE STATUS	EDUCATIONAL ATTAINMENT									
	No High School Degree	High School Degree	Some College	Associate Degree	Bachelor's Degree	Masters Degree	Ph. D.	Advanced Professional Degree	Total	
Employed	67.3	445.0	487.9	60.7	292.1	95.3	19.7	10.2	1478.2	
<i>Percent of Row Total</i>	4.6	30.1	33.0	4.1	19.8	6.4	1.3	0.7		
Male	44.3	243.5	257.3	24.1	163.6	48.6	18.0	6.4	805.8	
<i>Percent of Row Total</i>	5.5	30.2	31.9	3.0	20.3	6.0	2.2	0.8		
Female	23.0	201.5	230.6	36.6	128.5	46.7	1.7	3.8	672.4	
<i>Percent of Row Total</i>	3.4	30.0	34.3	5.4	19.1	6.9	0.3	0.6		
Unemployed	5.5	21.3	20.3	3.9	8.4	1.9	0.0	0.0	61.3	
<i>Percent of Row Total</i>	9.0	34.7	33.1	6.4	13.7	3.1	0.0	0.0		
Male	3.6	9.9	10.0	1.3	4.8	0.0	0.0	0.0	29.6	
<i>Percent of Row Total</i>	12.2	33.4	33.8	4.4	16.2	0.0	0.0	0.0		
Female	1.9	11.4	10.2	2.6	3.6	1.9	0.0	0.0	31.6	
<i>Percent of Row Total</i>	6.0	36.1	32.3	8.2	11.4	6.0	0.0	0.0		
Underemployed	7.3	24.7	21.9	1.0	29.7	12.5	0.7	0.0	97.8	
<i>Percent of Row Total</i>	7.5	25.3	22.4	1.0	30.4	12.8	0.7	0.0		
Male	5.0	11.9	8.6	0.0	16.0	8.5	0.0	0.0	50.0	
<i>Percent of Row Total</i>	10.0	23.8	17.2	0.0	32.0	17.0	0.0	0.0		
Female	2.4	12.8	13.2	1.0	13.7	4.0	0.7	0.0	47.8	
<i>Percent of Row Total</i>	5.0	26.8	27.6	2.1	28.7	8.4	1.5	0.0		

TABLE 10
EDUCATIONAL ATTAINMENT FOR THE EFFECTIVE LABOR FORCE:
MONTGOMERY COUNTY AREA
(DATA IS WEIGHTED)

EFFECTIVE LABOR FORCE STATUS	EDUCATIONAL ATTAINMENT									
	No High School Degree	High School Degree	Some College	Associate Degree	Bachelor's Degree	Masters Degree	Ph. D.	Advanced Professional Degree	Total	
Employed	4.8	65.3	68.6	15.7	35.1	19.5	4.1	4.1	217.3	
<i>Percent of Row Total</i>	2.2	30.1	31.6	7.2	16.2	9.0	1.9	1.9	100.0	
Male	0.0	41.1	31.5	6.9	20.6	8.2	4.1	4.1	116.5	
<i>Percent of Row Total</i>	0.0	35.3	27.0	5.9	17.7	7.0	3.5	3.5	100.0	
Female	4.8	24.2	37.1	8.9	14.5	11.3	0.0	0.0	100.8	
<i>Percent of Row Total</i>	4.8	24.0	36.8	8.8	14.4	11.2	0.0	0.0	100.0	
Unemployed	2.2	4.0	3.0	0.0	0.0	0.0	0.0	0.0	9.2	
<i>Percent of Row Total</i>	23.9	43.5	32.6	0.0	0.0	0.0	0.0	0.0	100.0	
Male	1.4	0.0	1.4	0.0	0.0	0.0	0.0	0.0	2.8	
<i>Percent of Row Total</i>	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	100.0	
Female	0.8	4.0	1.6	0.0	0.0	0.0	0.0	0.0	6.4	
<i>Percent of Row Total</i>	12.5	62.5	25.0	0.0	0.0	0.0	0.0	0.0	100.0	
Underemployed	0.0	5.2	9.2	2.2	2.4	3.5	0.0	0.0	22.5	
<i>Percent of Row Total</i>	0.0	23.1	40.9	9.8	10.7	15.6	0.0	0.0	100.0	
Male	0.0	2.7	2.7	1.4	0.0	2.7	0.0	0.0	9.5	
<i>Percent of Row Total</i>	0.0	28.4	28.4	14.7	0.0	28.4	0.0	0.0	100.0	
Female	0.0	2.4	6.5	0.8	2.4	0.8	0.0	0.0	12.9	
<i>Percent of Row Total</i>	0.0	18.6	50.4	6.2	18.6	6.2	0.0	0.0	100.0	

TABLE II
UNEMPLOYMENT AND UNDEREMPLOYMENT BY EDUCATIONAL ATTAINMENT
KANSAS AND THE MONTGOMERY COUNTY AREA
(DATA IS WEIGHTED)

EFFECTIVE LABOR FORCE STATUS	EDUCATIONAL ATTAINMENT										Total
	No High School Degree	High School Degree	Some College	Associate Degree	Bachelor's Degree	Masters Degree	Ph. D.	Advanced Professional Degree			
KANSAS											
Employed	67.3	445.0	487.9	60.7	292.1	95.3	19.7	10.2			1478.2
Unemployed	5.5	21.3	20.3	3.9	8.4	1.9	0.0	0.0			61.3
<i>Unemployment Rate</i>	7.6	4.6	4.0	6.0	2.8	2.0	0.0	0.0			4.0
Underemployed	7.3	24.7	21.9	1.0	29.7	12.5	0.7	0.0			97.8
<i>Underemployment Rate</i>	9.9	5.3	4.3	1.5	9.9	12.9	3.6	0.0			6.3
<i>Combined Unemployment and Underemployment Rate</i>	17.4	9.9	8.3	7.6	12.7	14.8	3.6	0.0			10.3
MONTGOMERY COUNTY AREA											
Employed	4.8	65.3	68.6	15.7	35.1	19.5	4.1	4.1			217.3
Unemployed	2.2	4.0	3.0	0.0	0.0	0.0	0.0	0.0			9.2
<i>Unemployment Rate</i>	31.4	5.8	4.2	0.0	0.0	0.0	0.0	0.0			4.1
Underemployed	0.0	5.2	9.2	2.2	2.4	3.5	0.0	0.0			22.5
<i>Underemployment Rate</i>	0.0	7.5	12.7	14.0	6.8	17.9	0.0	0.0			9.9
<i>Combined Unemployment and Underemployment Rate</i>	31.4	13.3	16.9	14.0	6.8	17.9	0.0	0.0			14.0

TABLE 12
SPECIAL FORMAL TRAINING BY EFFECTIVE LABOR FORCE CATEGORY
(DATA IS WEIGHTED)

EFFECTIVE LABOR FORCE CATEGORY	KANSAS			
	With Special Training	Percent of Group	Without Special Training	Percent of Group
Employed	748.2	50.9%	722.1	49.1%
Unemployed	29.3	47.8%	31.9	52.2%
Underemployed	40.3	41.2%	57.6	58.8%
EFFECTIVE LABOR FORCE CATEGORY	MONTGOMERY COUNTY AREA			
	With Special Training	Percent of Group	Without Special Training	Percent of Group
Employed	118.0	54.3	99.3	45.7
Unemployed	2.4	26.1	6.8	73.9
Underemployed	14.9	66.2	7.6	33.8

TABLE 13
SPECIAL ON-THE-JOB TRAINING:
BY EFFECTIVE LABOR FORCE CATEGORY
(DATA IS WEIGHTED)

EFFECTIVE LABOR FORCE CATEGORY	KANSAS			
	With Special On-The-Job Training	Percent of Group	Without Special On-The-Job Training	Percent of Group
Employed	773.8	52.8%	692.2	48.2%
Unemployed	18.2	32.7%	37.6	67.3%
Underemployed	21.5	22.1%	75.6	77.9%
EFFECTIVE LABOR FORCE CATEGORY	MONTGOMERY COUNTY AREA			
	With Special On-The-Job Training	Percent of Group	Without Special On-The-Job Training	Percent of Group
Employed	99.5	45.8	117.8	54.2
Unemployed	2.4	26.1	6.8	73.9
Underemployed	10.3	45.8	12.2	54.2

TABLE 14
CURRENTLY ENROLLED
IN EITHER SCHOOL OR SPECIAL TRAINING
(DATA IS WEIGHTED)

EFFECTIVE LABOR FORCE CATEGORY	KANSAS					
	Not Enrolled	Percent of Group	School	Percent of Group	Special Training	Percent of Group
Employed	1,295.6	88.6%	141.7	9.7%	24.7	1.7%
Unemployed	45.3	80.8%	10.8	19.2%	0.0	0.0%
Underemployed	72.6	74.7%	23.1	23.8%	1.4	1.4%
EFFECTIVE LABOR FORCE CATEGORY	MONTGOMERY COUNTY AREA					
	Not Enrolled	Percent of Group	School	Percent of Group	Special Training	Percent of Group
Employed	191.8	88.2	24.0	11.0	1.6	0.7
Unemployed	6.4	88.9	0.8	11.1	0.0	0.0
Underemployed	18.2	80.9	4.3	19.1	0.0	0.0

APPENDIX B

The Information the Survey Needed to Generate¹

We had four categories of questions we wanted to ask the respondents: (1) demographic questions, (2) employment or (3) unemployment questions, and (4) industry and occupation questions. For each of these basic categories of information, we wanted to determine the following information about the respondents:

- (1) *Demographic Information:* We wanted basic demographic information about the respondents: the county they lived in, whether they lived within any city limits, what year were they born, whether they were male or female, what type of education and training they had, and their income.
- (2) *Employment Information:* We wanted to know if respondents were employed, and if so we wanted to know if they were self-employed, if they had multiple jobs, and if they were part-time workers who wanted full-time employment.
- (3) *Unemployment Information:* For the persons who did not have jobs, we wanted to know if they had been laid off, were seeking employment, or had become discouraged workers.
- (4) *Industry and Occupation Information:* For those employed, we wanted to know the basic type of industry they worked in and a description of their occupations. We also wanted to know if they were temporary workers who wanted permanent positions, and if they were workers who felt that their skills were not being fully utilized on their current jobs.

For us to move from this general description of the information we wanted from the respondents to a more precise characterization which was consistent with the data derived from the CPS, we needed accurate definitions of the concepts of employed worker, unemployed person, involuntarily part-time worker, involuntary temporary worker, and worker with underutilized skills. The categories measured by the CPS have been defined by the Bureau of Labor Statistics (BLS). However, two of the categories we wished to measure — temporary workers who want permanent jobs and workers with mismatched skills and job requirements — are not defined by the BLS, nor is there a definitive conventional usage. In the next section, we give specific meaning to each of these concepts.

Definition and Description of Terms

We will first give the definitions used by BLS for employed worker, unemployed worker, discouraged worker, and involuntary part-time worker. In the cases of unemployed workers and discouraged workers we will add a few brief comments on the definitions.² Then we will provide our

¹This whole appendix is taken from our previous report, *The Effective Labor Force in Kansas*, pp. 8-14.

²All of these definitions come from the section designated "Household Data ('A' tables, monthly; 'D' tables, quarterly)," near the back of the BLS monthly publication titled *Employment and Earnings*.

definitions for temporary workers who want permanent jobs and for workers with a mismatch between their skills and job requirements of their current job. In addition we will describe how we applied our own definitions.

Employed persons:

All persons who, during the reference week, (a) did any work at all (at least 1 hour) as paid employees in their own business, profession, or on their own farm, or who worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family, and (b) all those who were not working but who had jobs or businesses from which they were temporarily absent because of vacation, illness, bad weather, child care problems, maternity or paternity leave, labor-management dispute, job training, or other family or personal reasons, whether or not they were paid for the time off or were seeking other jobs.

Unemployed persons:

All persons who had no employment during the reference week, were available for work, except for temporary illness, and had made specific efforts to find employment some time during the 4-week period ending with the reference week. Persons who were waiting to be recalled to a job from which they had been laid off need not have been looking for work to be classified as unemployed.

We will expand on this definition with the help of an article by two BLS researchers. First, looking for work means an active job search. "Only individuals who actually said they did 'nothing' or used passive methods exclusively would be classified as not in the labor force instead of unemployed."³ Second, those counted as unemployed because they were "on layoff" must expect to be recalled.

Discouraged workers:

Persons not in the labor force who want and are available for a job and who have looked for work sometime in the past 12 months (or since their last job if they held one within the past 12 months), but are not currently looking, because they believe there are no jobs available or there are none for which they would qualify.

The definition of discouraged worker has been widely criticized as being too subjective. The latest revision of the CPS instrument, which was first used for official estimates in 1994, added two questions to limit some of the subjectivity. The new questionnaire included "questions to determine whether a person has searched for a job within the last 12 months, and whether an individual was

³Anne E. Polivka and Jennifer M. Rothgeb, "Redesigning the CPS Questionnaire," *Monthly Labor Review*, September 1993, p. 21.

available to work during the reference week."⁴ Because of these changes in the CPS survey, the number of discouraged workers dropped substantially, and as a result, BLS has discontinued the publication of the historical series on discouraged workers.

At work part time for economic reasons:

Sometimes referred to as involuntary part time, this category refers to individuals who gave an economic reason for working 1 to 34 hours during the reference week. Economic reasons include slack work or unfavorable business conditions, inability to find full-time work, and seasonal declines in demand. Those who usually work part time must also indicate that they want and are available to work full time to be classified as on part time for economic reasons.

Temporary workers who want permanent jobs:

We found the concept of a temporary worker vague for a couple of reasons: we are all temporary in some sense, and many businesses and governments hire workers initially on a temporary basis with the idea of giving them permanent status if they work out. The phenomenon we are trying to assess is the use of workers from a personnel supply firm by other businesses on a temporary basis. This segment of the labor force has been one of the fastest growing components of the national economy over the last 20 years.⁵ "Though the personnel supply industry currently comprises less than 2 percent of total employment, it accounted for over 15 percent of employment growth between 1992 and 1993." However, "there has been considerable controversy about the social desirability of temporary help. Some describe temporary workers as an underclass who, because of their contingent status, do not receive sufficient human capital investments to succeed in today's labor market."⁶

Our concern is that some of these temporary workers wanted permanent jobs and were not able to find them. If a permanent job became available for these workers, they would want to change jobs, and thus, would be part of the available labor force. We used two basic criteria to distinguish this group of workers: they must work for a temporary employment agency and they must be willing to take a permanent job if offered.

Workers with a mismatch between their skills and experience and the requirements of their job:

⁴*Ibid.*, p. 24.

⁵Lewis M. Segal and Daniel G. Sullivan, "The Temporary Labor Force," *Economic Perspectives*, published by the Federal Reserve Bank of Chicago, March/April 1995, p. 6. The authors note two features of this industry:

First, the average growth rate of the personnel supply industry has been much higher than that of the economy as a whole, averaging 11 percent annualized growth per quarter since 1972 compared with 2 percent in the aggregate economy...Second, personnel supply employment growth is much more volatile than aggregate employment, falling more during economic contractions and rising more during expansions. (p. 6)

⁶*Ibid.*, p. 2.

The basic idea of this category is clear from examples: college graduates "flipping burgers", or accountants who have lost their jobs and are now working as a cab drivers.⁷ Clearly these are cases of people with skills superior to the job they currently have. The problem comes in the application of this idea to actual cases, because many people believe that they have skills or abilities superior to the job they currently have, and thus, believe themselves to be an underutilized worker. Without a full work history and some additional in-depth study, it is hard to judge the validity of these individual claims of underutilization.

Since the only information we can generate to evaluate people's claims of underutilization of their skills is the information that we receive from these people through the survey, we have to depend upon their own evaluation to some extent. However, we tried to balance this subjective evaluation with some additional objective criteria. *The net result is that for us to classify respondents as having underutilized skills (mismatched), they had to identify themselves as mismatched and have some objective criteria to support this belief.* These objective criteria could either be that 1) a respondent had a previous job that required greater training and/or skills, or 2) since they began their current job, they have received additional training and/or education, or 3) their current job does not require the training and/or education they have obtained. Finally, we have not included having a previous job which paid more as a criteria for a mismatched worker. The logic behind this decision is that labor market changes, either the demand for workers in a particular occupation falling, or the supply of workers in a particular occupation increasing, can result in lower wages for that occupation without changing the education, training or skills needed for the job.

Structure of the Survey Instrument

The requirements built into the construction of the survey instrument clashed with the constraints on time and complexity necessary to make the survey workable. We wanted basic demographic information about the respondents; we wanted to estimate the basic labor force concepts of employment and unemployment; we wanted to estimate the four types of underemployment; we wanted the survey instrument to be simple enough for respondents to answer over the phone; and, we wanted the survey interview to last no more than eight minutes. We met the

⁷Robert Lucas, the recent noble laureate in economics from the University of Chicago is an example of an economist who takes the position that underemployment does not exist. The following is part of a conversation between Arjo Klamer (AK) and Lucas (RL) at the peak of the 1981-1982 recession:

AK: My taxi driver here is driving a taxi, even though he is an accountant, because he can't find a job. He is obviously frustrated. It seems a lot of people are running around in that position.

RL: I would describe him as a taxi driver [laughing], if what he is doing is driving a taxi.

AK: But a frustrated taxi driver.

RL: Well, we draw these things out of urns, and sometimes we get good draws, and sometimes we get bad draws.

A couple of questions later, Lucas characterizes the Great Depression as follows:

If you look back at the 1929 to 1933 episode, there were a lot of decisions made that, after the fact, people wished they had not made; there were a lot of jobs people quit that they wished they had hung on to; there were job offers that people turned down because they thought the wage offer was crappy. Then three months later they wished they had grabbed. Accountants who lost their accounting jobs passed over a cab-driver job, and now they're sitting on the street while their pal's driving a cab. So they wish they'd taken the cab-driver job. People are making this kind of mistake all the time. (p. 41)

Arjo Klamer, *The New Classical Marcoeconomics: Conversations with the New Classical Economists and their Opponents*, Harvester Press, Brighton, U.K., pp. 40-41.

simplicity and time constraints of the survey instrument by leaving out a number of questions used in the CPS. We added a few questions concerning demographics and we added questions about temporary employment and workers with underutilized skills. The result was a survey instrument consisting of four groups of questions which are described below. The survey instrument used to create the computer program that the telephone surveyors used to record answers from interviews is presented in Appendix A. The copy of this survey instrument in the appendix is the same one given to all surveyors prior to their actual interviewing of respondents. In addition to the questions, the survey instrument includes a general explanation and specific explanations of each section of the survey instrument.

The first group of questions requests basic demographic information about the households which answer the survey. These questions asked about the county the person lived in, whether they lived within any city limits, what year were they born, whether they were male or female, what types of education and training they may have had, and what their income was in the past year. We began the survey with the first four demographic questions because they are easy and innocuous. This is not true of the education and training questions, and it is particularly not true of the income questions. Because income is a sensitive subject that can cause respondents to end the interview at that point, we waited until the end of the survey to ask the income questions. We placed the education and job training questions just before the income questions.

The second group of questions seeks employment information about the person interviewed. The initial question was designed to identify persons who might be self-employed or working for the family business. Later questions further refined our knowledge of these people. The next set of questions was designed to identify persons who work for pay, do not work, or are not part of the labor force. Some of these questions tried to identify those persons who are not part of the labor force, for example, disabled, retired, etc. If someone had a job but was absent from work last week, they were asked why they were absent from work. Respondents were then asked whether they have more than one job. One of the most difficult problems with asking people about their employment is trying to determine in some cases whether they are full-time or part-time workers. The next three sections of the instrument were designed to identify part-time workers and determine if they are part-time for economic reasons (sometimes referred to as involuntary part-time) or if they are part-time for non-economic reasons (they prefer to work part-time given their situation).

The third group of questions is aimed at persons who are out of work. The first section directs questions to persons who are on layoff and asks if they have been given any indication they will be recalled. The next section is designed to determine if persons who say they want jobs have been looking for work, and if they have been looking, what they have been doing to find work. The third section is designed to identify those persons who want a job but have stopped looking because they believe there are no jobs available for them, for example, discouraged workers.

The fourth group of questions asks the person interviewed for information about their job. We begin by asking those without a job something about their job history. We then ask respondents that currently have a job about that job's characteristics: their occupation and the industry within which they work. This information is important in and of itself, but it is also important for comparison later when the respondent is asked whether they feel they are underemployed. The second part of this group of questions is directed at temporary workers. We ask them to identify themselves if they are temporary workers, then we ask how long they have been temporary workers and how long they expect to be temporary workers, and finally we ask them if they want to have a permanent job. The third part of this group of questions is designed to identify mismatched workers, workers whose

education, training or skills are not being fully utilized in their current job. Determining whether a person is a mismatched worker is a tricky problem. Simply asking people seems guaranteed to yield exaggerated estimates of the number of mismatched persons. For that reason, several checks are incorporated in this section. The first check is to ask why they think they are a mismatched worker. Surprisingly, a large number of respondents do not have an answer to this question. Second, if respondents answer that they had a previous job which required more skill, then we ask them to identify that job. This information can then be used for comparison with the answers to the occupational questions. Finally, we ask if they would change jobs if the new job better utilized their skills. To affect the available labor force, they must be willing to change jobs to better utilize their skills, otherwise these skills are superfluous.

APPENDIX C THE SURVEY INSTRUMENT

This appendix contains the survey instrument that was the basis of the survey. First is an outline of the questions asked, then the survey instrument itself.

OUTLINE

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Earnings	C-18

Questionnaire

Last revised 8/18/97

GENERAL PURPOSE OF THE SURVEY

This survey is designed to give a detailed description of the Montgomery Area labor force and some general information about the retail sales in Montgomery County. In particular, we want a better understanding of the underemployed in the area. The underemployed are defined as the (1) Unemployed, (2) Part-time who want to work Full-time, (3) Temporary workers who want to be Permanent, (4) Discouraged workers, workers who have given up finding a job, and (5) Mismatched workers, workers who are working at jobs that do not require their skill or education level.

Our survey is based on the Current Population Survey which is used by the Bureau of Labor Statistics to estimate the monthly Civilian Labor Force, Employed, Unemployed, and Unemployment Rate for the United States. We have reduced the number of questions, but as you will see, our survey is still detailed and complex. As you go through the survey you will see that no respondent will answer all questions, and in fact, most will only answer a small percentage of the total number of questions.

HOUSEHOLD DATA

These first set of questions are designed to just get some basic demographic details from the respondents. All of the answers are confidential.

Q18-1	In what county do you live? LIST THE COUNTIES IN THE AREA	
<hr/>		
Q18-2	Do you live within the city limits of any city?	
	No	0
	Yes	1
[blind]	Don't know	2
<hr/>		
Q18-3	In what year were you born? _____	
<hr/>		
Q18-4	Are you male or female?	
	Male	0
	Female	1
[blind]	Refused	2
<hr/>		
Q18-5	How many persons are in your household? _____	

FAMILY BUSINESS

These initial question about family business is designed to identify self-employed persons. If someone owns a business or works for a family business, whether for pay or not, they are generally considered employed.

Q19.	I am going to ask a few questions about work-related activities LAST WEEK. By last week I mean the week beginning on Sunday and ending on Saturday.	
<hr style="border-top: 1px dashed black;"/>		
Q19A	Does anyone in this household have a business or a farm?	
	No	0
	Yes	1
[blind]	Don't Know	2
[blind]	Refused	3

AT WORK

The next set of questions is designed to identify persons who work for pay, do not work, or are not part of the labor force. Some of these questions try to identify those persons who are retired, etc. and are not part of the labor force. We do not need to ask anymore questions of persons not in the labor force. Some of these questions also further refine our knowledge of the people who work for the family business.

	(If Q19A is "yes", then parentheses should be filled.)	
Q20.	LAST WEEK, did you do ANY work for (either) pay (or profit)? Being on either paid vacation or paid sick leave counts as doing work for pay.	
	No	0
	Yes	1 (Skip to Q20-1)
[blind]	Refused	2
<hr style="border-top: 1px dashed black;"/>		
Q20-CK.	Q19A is "No", "D" or "R".. Q19A is "Yes"	0 (Skip to Q20A-1) 1 (Ask Q20-2)
<hr style="border-top: 1px dashed black;"/>		
Q20-1	Do you work in the same county that you live in?	
	No	0
	Yes	1
	Don't know	2
<hr style="border-top: 1px dashed black;"/>		
Q20-1a	About how far do you travel to work, one way, on an ordinary day? _____ (Skip to Q20C)	

Q20-2.	LAST WEEK, did you do any unpaid work in the family business or farm?	
	No	0 (Skip to Q20A-1)
	Yes	1
[blind]	Don't know	2 (Skip to Q20A-1)
[blind]	Refused	3 (Skip to Q20A-1)

Q20-3. Do you receive any payments or profits from the business?

	No	0
	Yes	1
[blind]	Don't know	2
[blind]	Refused	3

Q20A-1. Why did you not work for pay last-week? Was it because you are:

	Retired	0 (Go to Q20A-4)
	Disabled	1 (Go to Q20A-2)
	Unable to work	2 (Go to Q20A-3)
	Already have a job	3 (Skip to Q20B-1)
	Other	4 (Skip to Q20A-4)

Q20A-2. Does your disability prevent you from accepting any kind of work during the next six months?

	No	0 (Skip to Q20A-4)
	Yes	1 (Out of Survey)
[blind]	Don't know	2 (Skip to Q20B-a)
[blind]	Refused	3 (Skip to Q20B-a)

Q20A-3. Do you have a disability that prevents you from accepting any kind of work during the next six months?

	No	0 (Skip to Q20A-4)
	Yes	1 (Out of Survey)
[blind]	Don't know	2 (Skip to Q20B-a)
[blind]	Refused	3 (Skip to Q20B-a)

Q20A-4. Do you currently want a job, either full or part-time?

	No	0 (Out of Survey)
	Yes or Maybe, it depends	1 (Skip to Q22)
[blind]	Don't know	2 (Skip to Q22)
[blind]	Refused	3 (Skip to Q22)

WITH A JOB

This small section is designed to determine why someone was absent from work last week. Question Q20B-a makes sure that the only people who answer these questions are people with jobs.

NOTE:	(If Q19A is yes, fill parenthetical.)	
Q20B-a.	LAST WEEK, (in addition to the business,) did you have a job either full or part-time? Include any you have not started to work at or any job from which you were temporarily absent.	
	No	0 (Return to Q20A-4)
	Yes	1
	Refused	2 (Out of Survey)

Q20B-1. What was the main reason you were absent from work LAST WEEK?

On layoff (temporary or indefinite)	0 (Skip to Q21)
Slack work/business conditions	1 (Skip to Q21)
Waiting for new job to begin	2 (Skip to Q20E-3)
Vacation/personal days	3
Own illness/injury/medical problems	4
Child care problems	5
Other family/personal obligation	6
Maternity or paternity leave	7
Labor dispute	8
Weather affected job	9
School/training	10
Civic/military duty	11
Other (Specify)	12

Q20B-2. Are you being paid by your employer for any of the time off last week?

	No	0
	Yes	1
[blind]	Don't know	2
[blind]	Refused	3

MULTIPLE JOBS

This sections is as it says, to determine if the respondent has multiple jobs.

NOTE:	"or business" should be displayed only if Q19A is "yes".	
Q20C.	LAST WEEK, did you have more than one job (or business), including part-time, evening or weekend work?	
	No	0 (Skip to Q20E-1)
	Yes	1
[blind]	Don't know	2 (Skip to Q20E-1)
[blind]	Refused	3 (Skip to Q20E-1)

NOTE:	"or businesses" should be displayed only if Q19A is yes.	
Q20D.	Altogether, how many jobs (or businesses) did you have?	
	2	0
	3	1
	4+	2
[blind]	Don't know	3
[blind]	Refused	4

USUAL HOURS

The next three sections (USUAL HOURS, ACTUAL HOURS, AND ECONOMIC PART-TIME) are designed to determine if the respondent is in fact a part-time worker and if they are part-time, do they want to be a full-time worker. Recall, that part-time who want to be full-time are considered underemployed, thus, these sections are central to the purpose of the survey.

These three sections are structure so that if someone tells you that they usually work certain hours which are part-time hours, then they will skip to Economic Part-Time. If they say their hours vary, then they will skip to Actual Hours and another attempt will be made to estimate hours. If, in either case the respondent identifies themselves as full-time, they will skip all the way to Industrial/Occupational data.

	(If Q20C is "yes", then fill parenthetical "main".)	
Q20E-1.	How many hours per week do you USUALLY get paid to work at your (main) job? (If Q20C is "yes") By "main" job we mean the one at which you usually work the most hours.	
Q20E-1a	(MAIN) JOB	Number of hours ⇒ _____
Q20E-1b	Hours vary	0 (Skip to Q20E-CK)
[blind]	Don't know	1 (Skip to Q20E-CK)
[blind]	Refused	2

- Q20E-CK. If Q20C is "yes" and Q20E-1 is less than 35 0
 If Q20C is "yes" and Q20E-1 is 35 or more 1 (Skip to Q25)
 If Q20C is "no" and Q20E-1 is less than 35 2
 If Q20C is "no" and Q20E-1 is 35 or more 3 (Skip to Q25)
 If Q20E-1 is "Hours vary" 4

NOTE: ("at all your jobs combined" should be filled if Q20D has an entry.)
 ("in the family business" should be filled if Q20-2 is yes.)

Q20E-2. Do you USUALLY get paid to work at least 35 hours or more per week (at your job)
 (at all your jobs combined) (in the family business or farm)?

- No 0 (Skip to Q20G-1)
 Yes 1 (Skip to Q25)
 Hours vary 2 (Skip to Q20F-1)
 [blind] Don't know 3 (Skip to Q20F-1)
 [blind] Refused 4 (Skip to Q20F-1)

Q20E-3 Will your new job be full-time or part-time?

- Full-time 0 (Skip to Q25)
 Part-time 1 (Skip to Q20G-1)
 Don't know 2 (Skip to Q20G-1)

ACTUAL HOURS

Q20F-1. LAST WEEK, how many hours did you ACTUALLY work?

Q20F-1a Number of hours ⇒ _____

Q20F-1b

- [blind] Don't know 0
 [blind] Refused 1

Q20F-2. Are you a full-time employee or a part-time employee?

- Full-time 0 (Skip to Q25)
 Part-time 1 (Skip to Q20G-1)
 [blind] Don't know 2 (**Out of Survey**)
 [blind] Refused 3 (**Out of Survey**)

ECONOMIC PART-TIME

Q20G-1. Do you want to work a full-time workweek of 35 hours or more per week?

- No 0
 Yes 1
 Regular hrs. are full-time 2 (Skip to Q25)
 [blind] Don't know 3
 [blind] Refused 4 (**Out of Survey**)

Q20G-2. Some people work part-time because they cannot find full-time work or because business is poor. Others work part-time because of family obligations or other personal reasons. What is your MAIN reason for working part-time?
(PROBE IF NECESSARY: What is your MAIN reason for working PART-TIME instead of FULL-TIME?)

	Slack work/business conditions	0
	Could only find part-time work	1
	Seasonal work	2
	Child care problems	3
	Other family/personal obligations	4
	Health/medical limitations	5
	School/training	6
	Retired/Social Security limit on earnings	7
	Full-time workweek is less than 35 hrs	8
	Other (specify)	9
[blind]	Don't know	10
[blind]	Refused	11

Q20G-CK All others 0 (Skip to Q22)
 If Q20G-1 is "No" 1

Q20G-3. What is the main reason you do not want to work full-time?

	Child care problems	0 (Skip
	Other family/personal obligations	1
	Health/medical limitations	2
	School/training	3
	Retired/Social Security limit on earnings	4 to
	Full-time workweek is less than 35 hrs	5
	Other (specify)	6
[blind]	Don't know	7
[blind]	Refused	8 Q25)

ON LAYOFF

The only way a respondent should get to these questions is if they answered question Q20B-1 (Why were you absent from work?) with either On layoff or Slack work/business conditions. These question probe for more information about the status of the worker who is laid off.

Q21.	Have you been given any indication that you will be recalled to work within the next 6 months?	
	No	0 (Skip to Q22)
	Yes	1
[blind]	Don't know	2 (Skip to Q22)
[blind]	Refused	3 (Skip to Q22)

Q21A.	Even though you expect to be called back to work, have you been looking for work during the last 4 weeks?	
	No	0
	Yes	1
[blind]	Don't know	2
[blind]	Refused	3

Q21B. As of the end of LAST WEEK, how long had you been on layoff?

Q21B.a Number _____

Q21B.b	Weeks	0
	Months	1
	Years	2

Q21B.c		
[blind]	Don't know	0
[blind]	Refused	1

Q21C. Is the job from which you are on layoff a full-time job of 35 hours or more per week?

	No	0
	Yes	1
[blind]	Don't know	2
[blind]	Refused	3

Q21C-CK	All others	0 (Skip to Q23-CK)
	If Q21A is "Yes"	1 (Skip to Q22)

LOOKING

Respondents have three ways of getting to this set of questions. Either they answered they wanted a job or might want a job to question Q20A-4, or they answered they wanted to work full-time but are currently working part-time, or they have not had any indication that they will be recalled from layoff in the next 6 months.

This section is designed to determine if the respondent has actively searched for a job recently. If they have, then they are unemployed. If they have not, then they are out of the labor force. This section also contains questions about what they have done to find a job. These questions are designed to help, and in some cases were supplied by the Kansas Dept. of Human Resources, those agencies which try to find jobs for persons searching for jobs. These questions give these agencies some idea of how Kansas workers search for jobs.

Q22.	Have you been doing anything to find work during the last 4 weeks?	
	No	0 (Skip to Q23-CK)
	Yes	1
[blind]	Don't know	2 (Skip to Q23-CK)
[blind]	Refused	3 (Skip to Q23-CK)

Q22A. What are all of the things you have done to find work during the last 4 weeks? (Mark ALL methods used; do not read list. **After each response ask, "Anything else?"**) For data sake, each answer is a cell, so if the answer is yes, then a 1 will be marked. For example, if contacted an employer directly, then Q22A.a will be marked 1, if not, then nothing.

	ACTIVE		PASSIVE
Contacted:			
a.	employer directly/interview	0	j. Looked at ads 0
b.	public employment agency	0	k. Attended job training
c.	private employment agency	0	programs/courses 0
d.	friends or relatives	0	l. Other passive (specify) 0
e.	school/university employment ctr	0	
f.	Sent out resumes/filled out applications	0	m. Nothing 0
g.	Placed or answered ads	0	
h.	Checked union/professional resisters	0	n. Don't know 0
i.	Other active (specify)	0	o. Refused 0

Q22B-1.	LAST WEEK, could you have started a job if one had been offered?
	No 0
	Yes 1 (Skip to Q22C-1)
	All Else 2 (Skip to Q22C-1)

Q22B-2.	Why is that?
	Waiting for new job to begin 0
	Own temporary illness 1
	Going to school 2 (Skip to Q24A)
	Other (specify in notes) 3 (Skip to Q24A)
[blind]	Don't know 4 (Skip to Q24A)
[blind]	Refused 5 (Skip to Q24A)

Q22C-1.	BEFORE you started looking for work, what were you doing: working, going to school, or something else?
	Working 0
	School 1 (Skip to Q22D)
	Left military service 2 (Plug "Quit job" in Q22C-2 and skip to Q22D)
	Something else 3 (Skip to Q22D)
[blind]	Don't know 4 (Skip to Q22D)
[blind]	Refused 5 (Skip to Q22D)

Q22C-2. Did you lose or quit that job, or was it a temporary job that ended?

- Lost job 0
 - Quit job 1
 - Temporary job ended 2
 - [blind] Don't know 3
 - [blind] Refused 4
-

(If Q22C-2 has an entry, then fill parenthetical with "that".)

Q22D. When did you last work at (a) job or business?

- Within last 12 months 0
 - More than 12 months ago 1
 - Never worked 2
 - [blind] Don't know 3
 - [blind] Refused 4
-

Q22E. As of the end of LAST WEEK, how long had you been looking for work?

Q22E.a Number _____

- Q22E.b Weeks 0
- Months 1
- Years 2

Q22E.c

- [blind] Don't know 0
 - [blind] Refused 1
-

Q22F. Have you been looking for full-time work of 35 hours or more per week?

- No 0
 - Yes 1
 - Doesn't matter 2
 - [blind] Don't know 3
 - [blind] Refused 4
-

- Q22F-CK All others 0 (Skip to Q25)
 - If Q22D is "Never worked" 1 (Skip to Q27-1)
-

DISCOURAGED WORKERS

Respondents get to these questions by indicating they want a job but have not actively search for a job in the last 4 weeks. The purpose of this section is to determine if these respondents are discouraged workers and to some extent, why they are discouraged workers. Since discouraged workers are part of the underemployed, this section is central to the survey.

Q23-CK	Q20-3 is "no"	0 (Skip to Q25)
	Q20B-1 is "Waiting for a new job to begin"	1 (Skip to Q25)
	All others	2
<p>Q23. Do you currently want a job, either full or part-time?</p>		
	No	0 (Skip to Q24A)
	Yes, or maybe, it depends	1
[blind]	Don't know	2 (Skip to Q24A)
[blind]	Refused	3 (Skip to Q24A)
<p>Q23A. What is the main reason you were not looking for work during the LAST 4 WEEKS? (Do not read list.)</p>		
	Believes no work available in line of work or area	0
	Couldn't find any work	1
	Lacks necessary schooling, training, skills or experience	2
	Employers think too young or too old	3
	Other types of discrimination	4
	Child care problems	5
	Family responsibilities	6
	In school or other training	7
	Ill-health, physical disability	8
	Transportation problems	9
	Other (specify)	10
[blind]	Don't know	11
[blind]	Refused	12
<p>Q23B. Did you look for work at any time during the last 12 months?</p>		
	No	0 (Skip to Q24A)
	Yes	1
[blind]	Don't know	2 (Skip to Q24A)
[blind]	Refused	3 (Skip to Q24A)
<p>Q23B-1. Did you actually WORK at a job or business during the last 12 months</p>		
	No	0
	Yes	1
[blind]	Don't know	2
[blind]	Refused	3

Q23B-2.	Did you do any of this work during the last 4 weeks?	
	No	0
	Yes	1 (Skip to Q24B)
[blind]	Don't know	2
[blind]	Refused	3

JOB HISTORY

This section asks for some brief job history from persons currently without jobs.

Q24A.	Have you worked at a job or business at any time during the past 12 months?	
	No	0 (Skip to Q24C)
	Yes	1
[blind]	Don't know	2 (Skip to Q24C)
[blind]	Refused	3 (Skip to Q24C)

Q24B.	What is the main reason you left you last job?	
	Personal, family, (incl. pregnancy)	0
	Return to school	1
	Health	2
	Retirement or old age	3
	Temporary, seasonal or intermittent job completed	4
	Slack work or business conditions	5
	Unsatisfactory work arrangements (hours, pay, etc.)	6
	Other (specify)	7
[blind]	Don't know	8
[blind]	Refused	9

Q24C.	Do you intend to look for work during the next 12 months?	
	No	0
	Yes, or it depends	1
[blind]	Don't know	2
[blind]	Refused	3

INDUSTRY/OCCUPATION

This sections asks the respondents questions about their current job. This information is important in and of itself, but it is also important for comparison later when the respondent is asked whether they feel they are underemployed.

The second part of this section is concerned with temporary workers. Very little is know about temporary workers, so we are asking questions about them besides the obvious question do they want to be permanent workers.

Q25	For your (MAIN) job, were you employed by government, by a private company, a non-profit organization, or were you self-employed?	
	Government	0
	Private company	1 (Skip to Q25A-2)
	Non-profit organization	2 (Skip to Q25B-1)
	Working in the family business	3 (Skip to Q25A-2)
	Self-employed	4 (Skip to Q25B-1)

Q25A-1	Were you working for the federal, state, or local government?	
	Federal	0 (Skip
	State	1 to
	Local	2 Q25B-1)

Q25A-2	Is this business or organization primarily:	
	Agricultural	0
	Mining	1
	Construction	2
	Manufacturing	3
	Transportation, Communications or Public Utility	4
	Wholesale or Retail Trade	5
	Finance, Insurance or Real Estate	6
	Service Industry	7

Q25B-1 What kind of work do you do, that is, what is (was) your occupation? (For example: plumber, typist, farmer...)

Q25B-1a _____

Q25B-1b		
[blind]	Don't know	0
[blind]	Refused	1

Q25B-2 What are your usual activities or duties at this job? (For example: types, keeps account books, files, sells cars, operates printing press, lays bricks...)

Q25B-2a _____

Q25B-2b		
[blind]	Don't know	0
[blind]	Refused	1

TEMPORARY WORKERS

These questions are designed to identify persons who for temporary job agencies, determine how long they have worked in this capacity, how long they expect to continue working, and whether they would like a permanent job.

Q25C-1 Many employers now hire workers both directly (permanent employees) and through a temporary employment agency (temporary employees). Are you a permanent or temporary employee?

	Permanent	0 (Skip to Q26-1)
	Temporary	1
[blind]	Don't know	2 (Skip to Q26-1)
[blind]	Refused	3 (Skip to Q26-1)

Q25C-2 How long have you been employed as a temporary worker?

Q25C-2a _____

Q25C-2b	days	1
	weeks	2
	months	3
	years	4

Q25C-2c	Don't know	0
	Refused	1

Q25C-3 How much longer do you expect to be employed in this job?

Q25C-3a _____

Q25C-3b	days	1
	weeks	2
	months	3
	years	4

Q25C-3c	Don't know	0
	Refused	1

Q25C-4 Would you like a permanent job?

	No	0
	Yes	1
[blind]	Don't know	2
[blind]	Refused	3

MISMATCH BETWEEN SKILLS AND JOB

Determining whether a person is mismatched between their job and their skills is a tricky problem. Simply asking people seems guaranteed to yield exaggerated estimates of the number of mismatched persons. For that reason, several checks are incorporated in this section. First, we ask why they think they are underemployed. Surprisingly, this eliminated more than half in the test survey. Second, if they answer that they had a previous job which required more skill, then we ask for that job. This can then be used for comparison with the data in the Industrial/Occupational section. Finally, we ask if they would change jobs if the new job better utilized their skills. This is central to the survey and the most difficult to analyze.

Q26-1	Because of circumstances, some people are forced to work at jobs that do not match their skill level. For example, a master plumber taking tickets at a movie theater would be a mismatch between skills and job requirements. Does your current job underutilize your skills, education and talents?	
	No	0 (Skip to Q27-1)
	Yes	1
[blind]	Don't know	2
[blind]	Refused	3 (Skip to Q27-1)

Q26-2	Why do you think you are currently underutilized in your job?	
	Had previous job that required more skill and/or education . . .	0
	Have had additional job training and/or education	1 (Skip to Q26-5)
	Current job does not require my training and/or education	2 (Skip to Q26-5)
	Had a previous job where I earned more income	3 (Skip to Q26-5)
	Don't know	4 (Skip to Q26-5)

Q26-3 What type of job have you had in the past which required more skill and/or education?

Q26-3a _____

Q26-3b
[blind] Refused 1

Q26-4	Taking into account inflation, did your previous job provide you with more income?	
	No	0
	Yes	1
	Don't know	2

Q26-5	Would you change jobs so you could better utilize your skills?	
	No	0
	Yes	1
[blind]	Don't know	2
[blind]	Refused	3

SKILLS AND EDUCATION

This sections simply asks for information about the education and skill level of the respondent and asks whether they are currently trying to improve that level skill or education level.

Q27-1	How much formal education have you completed?	
	Less than High School	0
	High School	1
	Some College	2
	Associates Degree	3
	Bachelors Degree	4
	Masters Degree	5
	Ph.D.	6
	Advanced Professional Degree (Medical, Law, etc.)	7

Q27-2	In addition to your formal education, have you received formal special training such as vocational training, apprentice training, or special professional training?	
	No	0
	Yes	1

Q27-3	Have you received special on-the-job training other than the usual introductory job training?	
	No	0
	Yes	1

Q27-4	Are you currently enrolled in school or a special training program?	
	No	0 (Skip to Q28)
	Enrolled in school	1
	Enrolled in a special training program	2

Q27-5	How do you anticipate that this schooling or training will change your employment status?	
	Promotion	0
	Increased pay at present job	1
	Change jobs with the same employer	2
	Change jobs with a new employer	3
	Don't know	4

RETAIL SALES

This section is designed to give some basic information about the retail shopping behavior of the respondents.

RS We are now going to ask you a few questions about where your household does its retail shopping.

RS-1 About how many times in the past year have you shopped in Montgomery County?

RS-2 About what percentage of the total amount your household spends on retail shopping in the past year was spent in Montgomery County? _____

RS-3 In which community in Montgomery County do you do the most shopping?

**LIST THE SHOPPING COMMUNITIES IN MONTGOMERY COUNTY
(Do we want to read list of shopping communities or do we just Montgomery County?)**

EARNINGS

This is the most sensitive section of the survey and probably the hardest to get answered. That is the reason it is last.

Q28-1	Under which income category would your earnings during calendar 1996 fall:	
	0 to \$20,000	0
	\$20,001 to \$40,000	1
	\$40,001 to \$60,000	2
	\$60,001 to \$80,000	3
	\$80,001 to \$100,000	4
	Over \$100,000	5
[blind]	Refused	6

APPENDIX D

Both Kansas and Oklahoma counties were targeted in the survey. The following is a list of the counties targeted:

Kansas counties

Elk
Chautauqua
Greenwood
Labette
Montgomery
Neosho
Wilson

Oklahoma counties:

Craig
Notawa
Osage
Washington

In some cases, only part of a county was part of the Montgomery County Labor Market.

The following are the prefixes that were used to generate the random sample of phone numbers:

251	255	256	273	278	287	289	325	331	332	333	335	336
337	374	378	431	467	485	532	534	537	568	624	627	658
698	725	736	763	782	788	839	879	948				

Some prefixes, such as 331 and 336, cross the Kansas-Oklahoma border.